

REGISTRATION OF AU OASIS PHALARIS<sup>1</sup>  
(Reg. No. 84)

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'AU OASIS' phalaris (*Phalaris aquatica* L.) is a cool season perennial forage grass developed by the Alabama Agriculture Experiment Station, Auburn University and released 24 Aug. 1981. It was tested under the experimental designation AP-2.

AU Oasis is an 8 clone synthetic originating from material selected from plant introductions established as spaced plants in 1959 by Hoveland. Plants were evaluated for vigor, winter growth, regrowth potential, and disease resistance. An open-pollinated progeny trial of selected clones was conducted for 3 years at the Auburn University Plant Breeding Unit, Tallahassee, Ala. to evaluate forage yield distribution. Clones were selected from the following sources: one each from P.I. 240280, P.I. 236482, P.I. 240284, P.I. 219636, P.I. 240242, two from P.I. 207960, and one from PS-68-264 in an old phalaris nursery. Ramets of selected clones were replicated ten times in an isolated seed production nursery. Polycross seed from the isolation was bulked in equal quantities from each clone and used to establish a breeder seed nursery.

Winter forage yields in Alabama of AU Oasis have averaged 41% more than 'Kentucky 31' tall fescue (*Festuca arundinacea* Schreb.): with differences being greatest at locations in the southern part of the State.<sup>3</sup> AU Oasis phalaris has bunch type growth and summer dormancy that creates less competition with Ladino clover during stress periods than does Kentucky 31 tall fescue.

Dry matter digestibility of AU Oasis forage during autumn and

winter declines after inflorescence emergence in spring and ranges from 63 to 74%. Crude protein content ranges from 17 to 25%. Average daily gain of beef steers averaged 0.78 kg/ha over a 3-year period and was similar to that obtained on high quality grain pastures. Alkaloid levels of AU Oasis have been low and have caused no animal toxicity in contrast to Australian cultivars which have alkaloid levels that cause problems in sheep.

AU Oasis phalaris is best adapted south of Latitude 33°N and northward in mild coastal areas. It has survived further north but low winter temperature caused considerable damage to leaf tissue after warm periods have stimulated new growth.

Original clones used in the formation of this variety have all been lost so breeder seed is being produced by Auburn University through careful isolation and cultural control of the existing breeder seed nursery. A small quantity of Syn. 1 seed is being kept in cold storage for breeder seed increase whenever necessary.

Foundation, registered, and certified seed of AU Oasis seed is being produced and marketed by International Seeds, Halsey, Ore. in accordance with the rules and regulations specified by the Alabama Crop Improvement Assoc.

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<sup>3</sup> Hoveland, C.S., R.L. Haaland, C.D. Berry, and J.F. Pedersen. 1982. Oasis phalaris, a new cool season perennial grass. Auburn Univ. (Alabama) Agric. Exp. Stn. Cir. 259.